CLAIMS

What is claimed is:

1. A method for displaying a plurality of images of an extended field of view associated with azimuthal transducer movement, the method comprising:

(a) compounding a first frame of data with a second frame of data in an overlapping region where the first and second frames are associated with first and second different transducer positions, respectively;

(b) displaying an extended field of view image responsive to (a); and

(c) displaying a compounded image comprising a sub-set of data corresponding to the extended field of view image, the compounded image adjacent to the extended field of view image.

2. The method of Claim 1 further comprising:

(d) displaying a first image responsive to the first frame of data absent the compounding of (a) adjacent to the compounded image.

3. The method of Claim 1 further comprising:

(e) extracting data for the compounded image associated with a section of the extended field of view image corresponding to the first transducer position.

4. The method of Claim 3 further comprising:

(e) transforming the extracted data.

5. The method of Claim 1 wherein (a) comprises compounding the first and second frames of data where the first frame of data comprises sector formatted data.

6. The method of Claim 1 wherein (a) comprises compounding first and second frames of data where the first frame of data comprises a sub-set of a scanned frame of data.

7. The method of Claim 6 wherein the sub-set of the scanned frame of data comprises data associated with an azimuthally centered section of the scanned frame of data.

8. The method of Claim 6 further comprising:

(d) controlling an amount of data within the sub-set of the scanned frame of data in response to user input.

9. A method for displaying a plurality of images of an extended field of view associated with azimuthal transducer movement, the method comprising:

(a) compounding a first frame of data with a second frame of data in an overlapping region where the first and second frames are associated with first and second different transducer positions, respectively;

(b) displaying a compounded image comprising a sub-set of image data responsive to (a); and

(c) displaying a first image responsive to the first frame of data absent the compounding of (a) adjacent to compounded image.

10. The method of Claim 9 further comprising:

(d) displaying an extended field of view image responsive to (a).

11. The method of Claim 10 further comprising:

(e) extracting data for the compounded image associated with a section of the extended field of view image corresponding to the first transducer position.

12. The method of Claim 11 further comprising:

(f) transforming the extracted data.

13. The method of Claim 9 wherein (a) comprises compounding the first and second frames of data where the first frame of data comprises sector formatted data.

14. The method of Claim 9 wherein (a) comprises compounding first and second frames of data where the first frame of data comprises a sub-set of a scanned frame of data.

15. The method of Claim 14 wherein the sub-set of the scanned frame of data comprises data associated with an azimuthally centered section of the scanned frame of data.

16. The method of Claim 14 further comprising:

(d) controlling an amount of data within the sub-set of the scanned frame of data in response to user input.

17. An apparatus for displaying a plurality of images of an extended field of view associated with azimuthal transducer movement, the apparatus comprising:

a transducer;

a processor operable to compound a first frame of data with a second frame of data in an overlapping region where the first and second frames are associated with first and second different transducer positions, respectively;

a display operable to display a compounded image comprising a sub-set of image data corresponding to the compounded first and second frames of data and to display a first image responsive to the first frame of data absent the compounding of the first and second frames of data, the compounded image adjacent to the first image.

18. The apparatus of Claim 17 wherein the display is operable to display an extended field of view image corresponding to the compounded first and second frames of data.

19. An apparatus for displaying a plurality of images of an extended field of view associated with azimuthal transducer movement, the apparatus comprising:

a transducer;

a processor operable to compound a first frame of data with a second frame of data in an overlapping region where the first and second frames are associated with first and second different transducer positions, respectively;

a display operable to display a compounded image comprising a sub-set of image data corresponding to the compounded first and second frames of data and to display a first image responsive to the first frame of data absent the compounding of the first and second frames of data, the compounded image adjacent to the first image.

20. The apparatus of Claim 19 wherein the display is operable to display an extended field of view image.

21. A method for displaying an image extracted from extended field of view data associated with azimuthal transducer movement, the method comprising:

(a) compounding a first frame of data with a second frame of data in an overlapping region where the first and second frames are associated with first and second different transducer positions, respectively; and

(b) displaying a compounded image comprising a sub-set of data responsive to (a) and corresponding to at least a portion of the overlapping region.